

Search history

Search 1: FT=(method and glass and surface and Dealkalization and (carbonic acid)) (Results 19)

Title: Reversible electrolytic system for softening and dealkazing water

Abstract: Source: US4671863A System for softening and dealkazing water by feeding said water to both chambers of an electrolytic cell which chambers are separated by a cation exchange membrane, applying DC voltage to the electrodes of the cell, at intervals, reversing the applied polarities, and drawing soft dealkazed water from the anodic compartments.

Classifications:

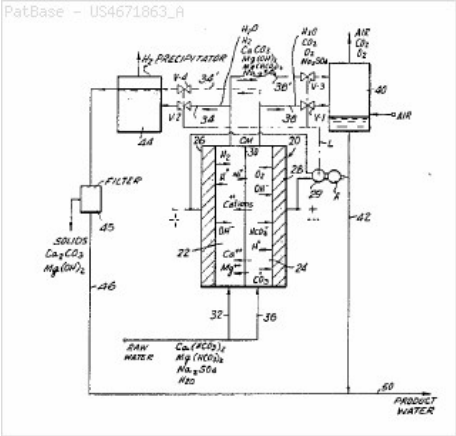
International (IPC 8-9): B01D61/42 C02F1/46 C02F1/469 (Advanced/Invention);
C02F1/00 C02F1/20 (Advanced/Non-invention);
B01D61/42 C02F1/46 C02F1/469 (Core/Invention);
C02F1/00 C02F1/20 (Core/Non-invention)

International (IPC 1-7): B01D13/02 C23B13/00

CPC: B01D61/46 B01D2311/2642 B01D2321/223 C02F1/001 C02F1/20 C02F1/4602
C02F1/4604 C02F1/469 C02F2201/4611 C02F2201/46115 C02F2201/4613
C02F2201/46185

European: B01D61/46 C02F1/469 C02F1/46E L01D311/26L L01D321/22B M02F1/00D
M02F1/20 M02F1/46C M02F201/461B12B M02F201/461B2 M02F201/461B4
M02F201/461B6B2

US: 204/101 204/151 204/266 204/301 204/638 204/87 205/464 205/480 205/555
205/635



Family:

Publication number	Publication date	Application number	Application date
US4671863 A	19870609	US19850792203	19851028

Priority:

US19850792203 19851028

Probable Assignee: TEJEDA ALVARO R

Assignee(s): (std): TEJEDA ALVARO R

Assignee(s): PAULINA RIELOFF TEJEDA ; PAULINA RIELOFF TEJEDA (50 PERCENT) ; PAULINA RIELOFF TEJEDA 50 PERCENT

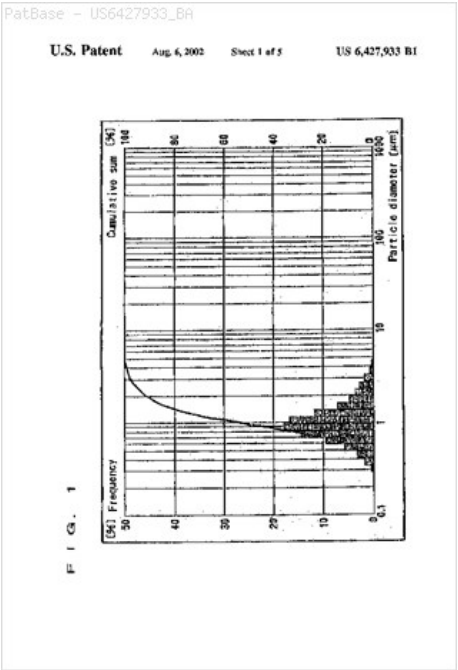
Inventor(s): (std): TEJEDA ALVARO R

Title: **Method** for manufacturing crystalline superfine silk powder

Abstract: Source: US6427933B The main theme of the invention is to provide a **method** for manufacturing industrially, by mechanically comminuting silk yarn, crystalline silk fibroin powder below 3 μm in an average particle diameter, which can be used for various applications. A silk substance such as cocoon filament, silk yarn, or raw silk is brought into an alkali aqueous solution under a pressure of 1 through 5 atmospheric pressure at temperatures from 100 degrees centigrade through 150 degrees centigrade to reduce the tensile strength of the silk substance to around 0.02 g/d or less. Thereafter, the resultant silk substance is subjected to **dealkalization** and drying. Subsequently, the resultant dried silk substance is comminuted into powder below 3 μm in an average particle diameter. Thus, the crystalline silk fibroin powder below 3 μm in an average particle diameter is manufactured.

Classifications:

International (IPC 8-9): B29B13/10 B29B9/12 C08H1/00 C08J3/12 C08L89/00 D01C3/00 (Advanced/Invention); D01C3/00 (Advanced/Non-invention); B29B13/10 B29B9/12 C08H1/00 C08J3/12 C08L89/00 (Core/Invention)
International (IPC 1-7): A61K7/021 A61K7/035 B02C21/00 B29B13/10 B29B9/12 C08H1/00 C08J3/12 C08L89/00
CPC: C08H1/00 C08J3/12 C08J2389/00
European: C08H1/00 C08J3/12 M08J389/00
US: 241/21 241/25 241/29



Family:

Publication number	Publication date	Application number	Application date
CN1122068 C	20030924	CN19998001632	19991221
CN1296505 A	20010523	CN19998001632	19991221
DE69923853 D1	20050331	DE19996023853	19991221
DE69923853 T2	20050714	DE19996023853T	19991221
EP1116743 A1	20010718	EP19990959957	19991221
EP1116743 A4	20021120	EP19990959957	19991221
EP1116743 B1	20050223	EP19990959957	19991221
JP2001048989 A2	20010220	JP19990259149	19990913
JP3362778 B2	20030107	JP19990259149	19990913
KR100393832 B1	20030806	KR20007003059	20000322
KR20010052075 A	20010625	KR20007003059	20000322
US6427933 BA	20020806	US20000509616	20000328
WO0075219 A1	20001214	WO1999JP07197	19991221

Priority:

JP19990157178 19990603 JP19990259149 19990913 WO1999JP07197 19991221

Probable Assignee: NATIONAL INST OF AGROBIOLOGICAL SCIENCES

Assignee(s): (std): NAT INST OF SERICULTURAL AND E ; JP NAT INST OF SERICULTURAL AN ; NAT INST OF AGROBIOLOGICAL SCI ; NAT INST OF AGROBIO SCIENCES ; AGENCY IND SCIENCE TECHN ; AGRICULTURAL BIOLOG RESOURCE R ; TSUBOUCHI KOZO ; NATL INST OF SERICULTURAL AND EN ; NATL INST OF SERICULTURAL AND ENTOMOLOGICAL SCIENC

Assignee(s): NATL INST OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE ; AGRICULTURAL BIOLOGICAL RESOURCE RESEARCH INST ; JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATION ; JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATIONAL INSTITUTE OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES ; JAPAN AS REPRESENTED BY DIRECTOR OF NATIONAL INSTI ; NATIONAL INST OF AGROBIOLOGICAL SCIENCES ; JAPAN REPRESENTED BY DIRECTOR OF NATIONAL INST OF ; JAPAN REPRESENTED BY DIRECTOR GENERAL OF NATIONAL ; NATIONAL INST ; NATIONAL INSTITUTE OF AGROBIOLOGICAL SCIENCES ; NATIONAL INSTITUTE OF AGROBIOLOGICAL SCIENCES TSUK ; JAPAN AS REPRESENTED BY DIRECTOR OF NATIONAL INSTITUTE OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES ; NATIONAL INSTITUTE OF AGROBIOLOGICAL SCIENCES TSUKUBA

Inventor(s): (std): KOZO TSUBOUCHI ; TSUBOUCHI KOZO

Designated states: AT BE CH CN CY DE DK ES FI FR GB GR IE IN IT KR LI LU MC NL PT SE US

Title: Cosmetic material containing crystalline superfine silk powder

Abstract: Source: US6719985B The invention provides a cosmetic material containing a crystalline superfine silk powder that has the original structure of silk yarn, properties such as an unique gloss, feeling of touch, flexibility, and elasticity; and various properties such as excellent coating power, spreadability, adhesion, feeling of touch, and formability, which are required of an extender powder or color material of cosmetics. The cosmetic material contains a colored crystalline superfine silk powder obtained by the steps of bringing a silk substance into contact with an alkali aqueous solution at temperatures ranging from 100 degrees centigrade to 150 degrees centigrade under a pressure ranging from 1 through 5 atmospheric pressures to weaken the silk substance to not greater than 0.02 g/d in tensile strength, dealcalizing and drying the silk substance powdering the silk substance into a crystalline superfine silk powder below 3 μm in average particle diameter, and dyeing the crystalline superfine silk powder with a natural or synthetic color material, or mixing the crystalline superfine silk powder with a natural or synthetic color material.

Classifications:

International (IPC 8-9): A61K8/00 A61K8/64 A61K8/96 A61Q1/00 A61Q1/06 A61Q1/12 A61Q19/00 (Advanced/Invention);

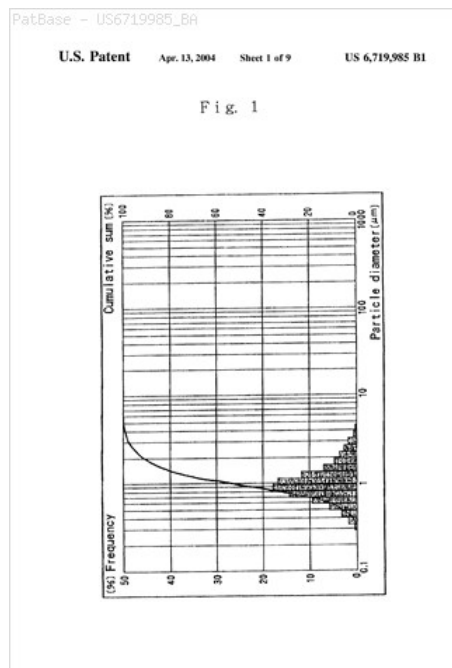
A61K8/00 A61K8/30 A61K8/96 A61Q1/02 A61Q1/12 A61Q19/00 (Core/Invention)

International (IPC 1-7): A61K 101/00 A61K07/00 A61K101/00 A61K6/00 A61K7/00 A61K7/02 A61K7/06 A61K7/48 A61K9/00 A61K9/14 C08J3/12

CPC: A61K8/64 A61Q1/06 A61Q1/12

European: A61K8/64 A61Q1/06 A61Q1/12

US: 424/400 424/401 424/489 424/70.1 424/701



Family:

Publication number	Publication date	Application number	Application date
CN1158985 C	20040728	CN20008001388	20000301
CN1317957 A	20011017	CN20008001388	20000301
DE60042999 D1	20091105	DE20006042999	20000301
EP1110534 A1	20010627	EP20000906593	20000301
EP1110534 A4	20060208	EP20000906593	20000301
EP1110534 B1	20090923	EP20000906593	20000301
JP2001026517 A2	20010130	JP19990198233	19990712
JP3505677 B2	20040308	JP19990198233	19990712
TH53880 A	20021118	TH20001002497	20000706
US6719985 BA	20040413	US20010762372	20010202
WO0103654 A1	20010118	WO2000JP01191	20000301

Priority:

JP19990198233 19990712 WO2000JP01191 20000301

Probable Assignee: NATIONAL INST OF AGROBIOLOGICAL SCIENCES

Assignee(s): (std): JAPAN REPRES BY DIR GEN OF AS ; TSUBOUCHI KOZO ; NATL INST OF SERICULTURAL AND EN ; OODOREMAN KK ; JP NAT INST OF SERICULTURAL AN ; NAT INST OF AGROBIO SCIENCES ; EAUDELEMAN CO LTD ; FUJIURA SHOKO ; INST OF AGRICULTURAL BIOLOG RE ; JAPAN AS REPRES BY DIR GEN OF

Assignee(s): JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATION ; JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATIONAL INST OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES ; EAUDELEMAN CO ; INST OF AGRICULTURAL BIOLOGICAL RESOURCES ; JAPAN REPRESENTED BY DIRECTOR GENERAL OF NATIONAL ; NATIONAL INST OF AGROBIOLOGICAL SCIENCES ; NATIONAL INSTITUT ; KOZO TSUBOUCHI ; NATIONAL INST ; NATIONAL INSTITUTE OF AGROBIOLOGICAL SCIENCES ; NATL INST OF SERICULTURAL AND ENTOMOLOGICAL SCIENC ; NATIONAL INSTITUTE OF AGROBIOLOGICAL SCIENCES TSUKUBA ; NATL INST OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE ; JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATIONAL INSTITUTE OF SERICULTURAL AND ENTOMOLOGICAL SCIENCE MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES

Inventor(s): (std): FUJIURA SHIYOUKO ; FUJIURA SHOKO ; KOZO TSUBOUCHI ; SHOKO FUJIURA ; TSUBOUCHI KOZO

Inventor(s): FUJIURA SHOKO EAUDELEMAN CO LTD

Agent(s): GODDAR HEINZ J

Designated states: AT BE BR CH CN CY DE DK ES FI FR GB GR IE IN IT KR LU MC NL PT SE US VN

Title: AQUEOUS ADHESIVE DISPERSIONS

Abstract: Source: US2005131109A An aqueous polymer dispersion that includes a) a polyurethane dispersion having an average particle size of 60 to 350 nm and b) an aqueous silicon dioxide dispersion having a particle diameter of the SiO₂ particles of 20 to 400 nm. The dispersion is prepared by mixing the polyurethane dispersion (a) with the silicon dioxide dispersion (b). The aqueous polymer dispersion can be used in adhesive compositions, which can be used to bond substrates together, especially substrates that are structural components of shoes.

Classifications:
International (IPC 8-9): A43B1/00 B60C1/00 B82B1/00 C08G18/08 C08G18/70 C08J3/02 C08K3/34 C08K3/36 C08L75/04 C09J11/04 C09J175/04 C09J175/06 (Advanced/Invention);
C08J3/02 C08K3/36 C08L75/04 C09J175/06 (Advanced/Non-invention);
A43B1/00 B82B1/00 C08G18/00 C08J3/02 C08K3/00 C08L75/00 C09J11/02 C09J175/04 C09J175/06 (Core/Invention);
C08G C08K C09J (Subclass/Invention)
International (IPC 1-7): C08G18/08 C08J5/10 C08K3/20 C08K3/34 C08K3/36 C08K5/5415 C08L75/04 C09D5/02 C09J175/04 C09J175/06
CPC: C08G18/706 C08G2170/80
European: C08G18/70K5D M08G170/80
US: 523/334 524/261 524/492 524/493 524/493S 524/589 524/589S 524/591 524/839

Family:

Publication number	Publication date	Application number	Application date
AT448284 E	20091115	AT20040764880T	20040907
AU2004280361 AA	20050421	AU20040280361	20040907
AU2004280361 BB	20100923	AU20040280361	20040907
CA2538956 AA	20060313	CA20042538956	20040907
CA2538956 C	20130115	CA20042538956	20040907
CN100475925 C	20090408	CN200480027048	20040907
CN1852961 A	20061025	CN200480027048	20040907
DE10343675 A1	20050414	DE20031043675	20030918
DE502004010359 D1	20091224	DE200450010359T	20040907
EP1664227 A1	20060607	EP20040764880	20040907
EP1664227 B1	20091111	EP20040764880	20040907
ES2334572 T3	20100312	ES20040764880T	20040907
HK1097290 A1	20091211	HK20070104219	20070423
HK1097290 A3	20070622	HK20070104219	20070423
IN00898DN2006 A	20070810	IN2006DN00898	20060221
JP2007533779 T2	20071122	JP20060526549T	20040907
JP4933895 B2	20120516	JP20060526549T	20040907
KR101158133 B1	20120619	KR20067005374	20040907
KR20060083210 A	20060720	KR20067005374	20040907
MXPA06002937 A1	20060531	MX2006PA02937	20040907
RU2006112558 A	20071110	RU20060112558	20040907
RU2366679 C2	20090910	RU20060112558	20040907
TW200524999 A	20050801	TW20040128098	20040917
TWI382073 B	20130111	TW20040128098	20040917
UA84168 C2	20080925	UA20060004370	20040907
US2005131109 AA	20050616	US20040939803	20040913
US8114931 BB	20120214	US20040939803	20040913
WO05035684 A1	20050421	WO2004EP09933	20040907

Priority:
DE20031043675 20030918 WO2004EP09933 20040907

Probable Assignee: BAYER MATERIALSCIENCE AG

Assignee(s): (std): ARNDT WOLFGANG ; BAJER MATIRIAL SAJENS AG ; BAYER MATERIAL SCIENCE LLC ; BAYER MATERIALSCIENCE AG ; HENNING WOLFGANG ; MUSCH RUEDIGER ; PANSKUS KNUT ; RISCHE THORSTEN ; WERNER RALF

Assignee(s): MUSCH RUDIGER

Inventor(s): (std): HENNING WOLFGANG ; KHENNING VOL FGANG ; KNUT PANSKUS ; MUSCH RUDIGER ; MUSCH RUEDIGER ; MUSH RJUDIGER ; PANSKUS KNUT ; RALF WERNER ; RISCHE THORSTEN ; RISHE TORSTEN ; RUDIGER MUSCH ; THORSTEN RISCHE ; VERNER RAL F ; WERNER RALF ; WOLFGANG ARNDT ; WOLFGANG ARNDT WOLFGANG MUSCH ; WOLFGANG HENNING ; ARNDT VOL FGANG ; ARNDT WOLFGANG ; RUEDIGER MUSCH

Inventor(s): ARNDT WOLFGANG MUSCH RUEDIGER PANSKUS KNUT... ; ARNDT WOLFGANG MUSCH RUEDIGER PANSKUS KNUT RISCHE ; VERNER RAL'F ; KHENNING VOL'FGANG ; ARNDT VOL'FGANG

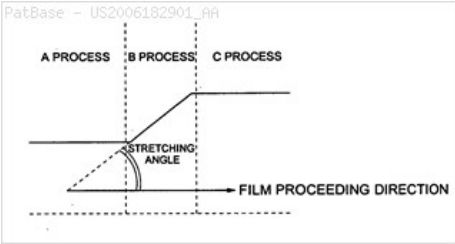
Agent(s): DAVIES COLLISON CAVE; NORTON ROSE CANADA SENCRL SRL LLP; OGILVY RENAULT LLP SENCRL SRL; BAYER MATERIAL SCIENCE LLC; ROBERT S; NOLAND J

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: STRETCHED CELLULOSE ESTER FILM, HARD COAT FILM, ANTIREFLECTIVE FILM, AND OPTICAL COMPENSATION FILM, AND POLARIZING PLATE, AND DISPLAY DEVICE USING THEM

Abstract: Source: US2006182901A In a stretched cellulose ester film containing a plasticizer, the plasticizer includes at least an aromatic terminal ester type plasticizer expressed by the following general formula (1): and stretched cellulose ester film includes a cellulose ester having a total acyl substitution degree of 2.4 to 2.9, a number average molecular weight (Mn) of 30000 to 200000, and a value of a weight-average molecular weight (Mw)/a number average molecular weight (Mn) being 1.4 to 3.0, B-(G-A)n-G-B General formula (1) where B represents a benzenemonocarboxylic acid residue, G represents an alkylene glycol residue having a carbon number of 2 through 12 or an oxyalkylene glycol residue having a carbon number of 4 through 12, A represents an alkylene dicarboxylic acid residue having a carbon number of 4 to 12, and n indicates an integer of 0 or more.

Classifications:
International (IPC 8-9): B29C55/00 B29C55/02 B29D7/01 B32B23/04 B32B23/08 B32B23/16 B32B23/20 C08J5/18 C08K5/10 C08K5/103 C08K5/11 C08L1/10 C09K19/00 G02B1/10 G02B1/11 G02B5/30 G02F1/1335 G02F1/13363 (Advanced/Invention); B29C55/00 B29K1/00 B29L7/00 C08J5/18 C08K5/103 C08K5/11 C08L1/10 (Advanced/Non-invention); B29C55/00 B29C55/02 B32B23/00 C08J5/18 C08K5/00 C08L1/00 C09K19/00 G02B5/30 G02F1/13 (Core/Invention)
International (IPC 1-7): B29C55/02 B29D7/01 B29K5/11 B32B23/20 C08J5/18 C08K5/103 C08K5/11 C08L1/10 G02B1/10 G02B5/30 G02F1/1335 G02F1/3363
CPC: Y10T428/1041 Y10T428/105 C08J5/18 B29C55/005 B29K2001/00 B29K2001/12 C08J2301/10 Y10T428/31971
European: B29C55/00B C08J5/18 L29K1/00 L29K1/12 M08J301/10
US: 106/182.1 106/184.3 106/186.2 428/1.31 428/1.310P 428/1.33 428/220 428/220S 428/532 428/532S 428/910 428/910S



Family:

Publication number	Publication date	Application number	Application date
CN100497448 C	20090610	CN200480030341	20041214
CN1867620 A	20061122	CN200480030341	20041214
JP5038625 B1	20121003	JP20050516482T	20041214
JP5038625 B2	20121003	JP20050516482	20041214
KR101142628 B1	20120510	KR20067007221	20041214
KR20060108613 A	20061018	KR20067007221	20041214
TW200533510 A	20051016	TW20040138991	20041215
TWI367160 B	20120701	TW20040138991	20041215
US2006182901 AA	20060817	US20060403340	20060413
US7635506 BB	20091222	US20060403340	20060413
WO05061595 A1	20050707	WO2004JP18977	20041214

Priority:
JP20030426549 20031224 WO2004JP18977 20041214 JP20050516482 20041214

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; TAKAGI TAKAHIRO

Inventor(s): (std): TAKAGI TAKAHIRO ; TAKAHIRO TAKAGI

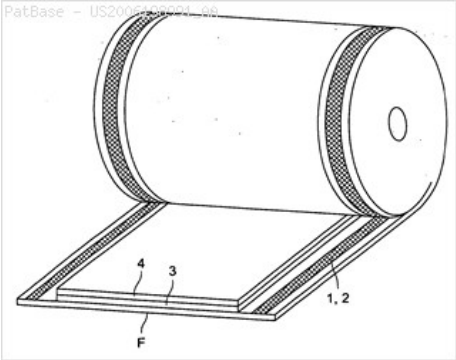
Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: PRODUCTION **METHOD** OF ROLLED OPTICAL FILM HAVING COATING LAYER, ROLLED OPTICAL FILM, POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY

Abstract: Source: US2006198991A A **method** for producing a roll film provided with a coat layer comprising the steps of: (i) producing a roll film; (ii) applying a first embossing treatment along a longitudinal direction of the roll film on a part of a lateral direction of the roll film; (iii) applying a coat layer on the roll film; (iv) applying a second embossing treatment along a longitudinal direction of the roll film on a part of a lateral direction of the roll film; (v) heat treating the roll film at a temperature of 50 to 150 degrees centigrade for a duration of 1 to 30 days while the roll film is rolled in a roll.

Classifications:
International (IPC 8-9): B32B7/02 G02B1/10 G02B5/30 G02F1/1335 B05D7/04 B28B11/08 B29C59/00 B29C59/04 B32B3/00 C08J5/18 G02B1/11 G02F1/13 (Advanced/Invention); B05D7/04 B28B11/08 B29C59/00 B29C59/04 G02B1/10 G02B5/30 G02F1/13 (Core/Invention)
CPC: Y10T428/24355 Y10T428/24612 B32B3/02 B29C39/18 B29C41/24 B29C59/04 B29C67/0044 B29C2791/001 B29K2001/00 B29K2001/12 B29K2995/003 B29L2007/008 B29L2009/00 B29L2011/00 B65H18/00 B65H37/00 B65H2301/5126 B65H2701/132 B65H2701/172 B65H2701/1752
European: B29C39/18 B29C41/24 B29C67/00K B32B3/02 B65H18/00 B65H37/00 L29C59/04 L29C791/00B L29K1/00 L29K1/12 L29K995/00E8 L29L11/00 L29L7/00G L29L9/00 L65H301/5126 L65H701/132 L65H701/172 L65H701/1752
US: 264/1.34 264/1.6 264/1.7 264/134 264/284 264/294 427/277 427/278 427/355 427/356 427/365 427/366 428/141 428/141S 428/172 428/172P



Family:

Publication number	Publication date	Application number	Application date
JP2006224607 A2	20060831	JP20050044068	20050221
JP4655663 B2	20110323	JP20050044068	20050221
KR101254336 B1	20130412	KR20060015501	20060217
KR20060093283 A	20060824	KR20060015501	20060217
TW200643065 A	20061216	TW20060105253	20060216
TWI389947 B	20130321	TW20060105253	20060216
US2006198991 AA	20060907	US20060356640	20060217
US7641837 BB	20100105	US20060356640	20060217

Priority:
JP20050044068 20050221

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC

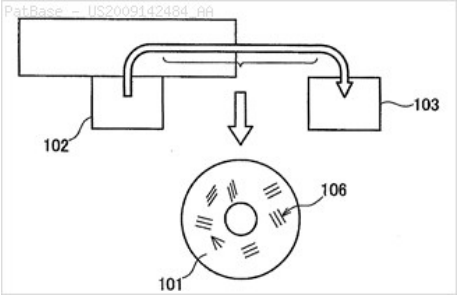
Inventor(s): (std): MIZOGUCHI KOUSEI ; MIZOGUCHI YASUMASA ; SHIMIZU KAZUYUKI ; TAKIYAMA NOBUYUKI

Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Title: **METHOD** OF MANUFACTURING MAGNETIC-DISK **GLASS** SUBSTRATE AND **METHOD** OF MANUFACTURING MAGNETIC DISK

Abstract: Source: US2009142484A A process for producing a **glass** substrate for magnetic disk through chemical strengthening operation, in which the distribution of compressive stress is uniformed at a **surface** layer portion of the **glass** substrate to thereby, while preventing failures such as head crash and thermal asperity, realize a low flying height of magnetic head, attaining high-density information recording. In particular, the provided **glass** substrate for magnetic disk is suitable for application to compact magnetic disks for portable information equipment. The chemical strengthening operation includes the first step of bringing the **glass** substrate into contact with a first treatment solution (chemical strengthening treatment solution) containing first ions with an ionic radius larger than those of ions within the **glass** substrate and either the second and subsequent steps of bringing the platy **glass** into contact with treatment solutions containing second and subsequent bivalent ions, or the second and subsequent steps of bringing the **glass** substrate into contact with second and subsequent chemical strengthening treatment solutions containing second and subsequent ions exhibiting an ion exchange rate with ions within the **glass** substrate greater than that of the first ions to thereby decelerate the ion exchange.

Classifications:
International (IPC 8-9): B05D5/12 C03C15/00 C03C17/00 C03C21/00 G11B5/00 G11B5/73 G11B5/84 (Advanced/Invention); B05D5/12 C03C21/00 G11B5/62 G11B5/84 (Core/Invention)
International (IPC 1-7): C03C21/00
CPC: G11B5/8404 C03C21/001 C03C21/002
European: C03C21/00B C03C21/00B2 G11B5/84B
US: 427/127 427/127P 427/128 65/30.14 65/60.7



Family:

Publication number	Publication date	Application number	Application date
CN101151224 A	20080326	CN200680010214	20060327
CN101151224 B	20100519	CN200680010214	20060327
JP2006282428 A2	20061019	JP20050102423	20050331
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JP4808985 B2	20111102	JP20050102423	20050331
JP4942305 B2	20120530	JP20050102424	20050331
TH83727 A	20070329	TH20061001494	20060331
US2009142484 AA	20090604	US20060910410	20060327
US2013287938 AA	20131031	US20130933163	20130702
US8499583 BB	20130806	US20060910410	20060327
WO06106627 A1	20061012	WO2006JP306147	20060327

Priority:
JP20050102423 20050331 JP20050102424 20050331 WO2006JP306147 20060327
US20070910410 20071001 US20130933163 20130702

Probable Assignee: HOYA CORP

Assignee(s): (std): HOYA CORP ; ISONO HIDEKI

Inventor(s): (std): HIDEKI ISONO ; ISONO HIDEKI

Agent(s): SUGHRUE MION PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: DISPERSION CONTAINING HOLLOW SiO₂, COATING COMPOSITION AND SUBSTRATE WITH ANTIREFLECTION COATING FILM

Abstract: Source: US2008124539A To provide a dispersion of hollow SiO₂, capable of obtaining, when formed into a coating composition, an antireflection film having high antireflection properties and low chroma saturation by forming a low refractive index coating film having a refractive index gradient. A dispersion of fine silica particles, having agglomerated particles which are agglomerates of primary fine particles of hollow SiO₂ dispersed in a dispersion medium, wherein the average particle size of the agglomerated particles is within a range of from 60 to 400 nm, and the average particle size is at least 1.5 times the average primary particle size of the silica. When a coating composition containing the dispersion is to be obtained, the matrix component is preferably a precursor of a metal oxide or an organic resin. By applying the coating composition to a substrate, a substrate with an antireflection coating film is obtained.

Classifications:
International (IPC 8-9): B05D5/06 B32B7/02 C09D1/00 C09D5/00 C09D7/12 B05D7/24 B32B27/20 B32B5/16 C01B33/113 C01B33/18 C09D17/00 C09D201/00 C09D5/32 G02B1/11 (Advanced/Invention); B05D5/06 B05D7/24 B32B27/20 B32B5/16 B32B7/02 C01B33/00 C09D17/00 C09D201/00 C09D5/00 C09D5/32 C09D7/12 G02B1/10 (Core/Invention); B05D B32B C01B C09D G02B (Subclass/Invention)
CPC: Y10T428/259 C09D7/1291 B82Y30/00 C01B33/14 C01B33/18 C03C17/007 C03C2217/45 C03C2217/478 C08J7/06 C08K7/26 C09D5/00 C09D7/005 C09D7/1266 C09D7/1275 G02B1/111 G02B1/113
European: B82Y30/00 C01B33/14 C01B33/18 C03C17/00D2 C08J7/06 C09D5/00 C09D7/00E C09D7/12N1 C09D7/12N2 C09D7/12S G02B1/11B G02B1/11D M03C217/450 M03C217/478 M08K7/26
US: 106/287.17 106/287.170S 106/287.19 106/287.190S 106/287.34 106/287.340S 428/331 428/331P 524/493 524/493S

Family:

Publication number	Publication date	Application number	Application date
CN101184815 A	20080521	CN200680019039	20060320
CN101184815 B	20101208	CN200680019039	20060320
EP1887059 A1	20080213	EP20060729565	20060320
EP1887059 A4	20081217	EP20060729565	20060320
EP1887059 B1	20140108	EP20060729565	20060320
HK1118304 A1	20110826	HK20080109359	20080821
HK1118304 A3	20090206	HK20080109359	20080821
JP2006335881 A2	20061214	JP20050162487	20050602
JP4883383 B2	20120222	JP20050162487	20050602
TW200704590 A	20070201	TW20060112489	20060407
US2008124539 AA	20080529	US20070947848	20071130
WO06129411 A1	20061207	WO2006JP305597	20060320

Priority:
JP20050162487 20050602 WO2006JP05597 20060320 WO2006JP305597 20060320

Probable Assignee: ASAHI GLASS CO LTD

Assignee(s): (std): ASAHI GLASS CO LTD ; YONEDA TAKASHIGE ; KAWAI YOHEI

Assignee(s): ASAHI GLASS COMPANY LIMITED ; ASAHI GLASS COMPANY LTD ; ASAHI GLASS CO

Inventor(s): (std): TAKASHIGE YONEDA ; YOHEI KAWAI ; YONEDA TAKASHIGE ; KAWAI YOHEI

Inventor(s): KAWAI YOHEI C O ASAHI GLASS CO 115 LTD ; YONEDA TAKASHIGE C O ASAHI GLASS CO LTD

Agent(s): MUELLER-BORE AND PARTNER PATENTANWALTE; MUELLER BORE AND PARTNER PATENTANWALTE; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC

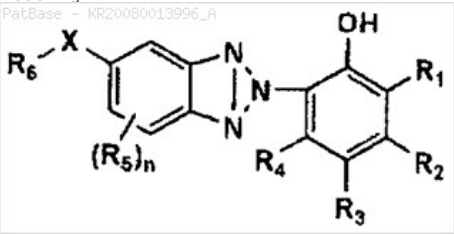
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Title: CELLULOSE ESTER FILM, POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY

Abstract: Source: US2006280882A An object of the present invention is to provide a polarizing plate protective film exhibiting a reduced variation value retardation, which is highly stable against polarizing plate degradation, polarizing plate dimension, and polarizing plate curl. Disclosed is a cellulose ester film possessing cellulose ester, polymer X having a weight average molecular weight of 2000-30000 prepared by copolymerizing ethylenic unsaturated monomer Xa containing no aromatic ring and hydrophilic group within a molecule and ethylenic unsaturated monomer Xb containing no aromatic ring but a hydrophilic group within a molecule, and polymer Y having a weight average molecular weight of 500-3000 prepared by polymerizing ethylenic unsaturated monomer Ya containing no aromatic ring.

Classifications:

International (IPC 8-9): B32B29/00 C08J5/18 C08L1/10 C08L33/08 C08L33/12 C09K19/00 G02B1/10 G02B1/11 G02B5/30 G02F1/1335 G02F1/13363 (Advanced/Invention); C08J5/18 C08L1/10 C08L33/08 C08L33/12 G02B5/30 G02F1/1335 (Advanced/Non-invention); B32B29/00 C08J5/18 C08L1/00 C08L33/00 C09K19/00 G02B5/30 G02F1/13 (Core/Invention); C08L33/00 (Core/Non-invention) **CPC:** Y10T428/1041 Y10T428/105 C08J5/18 C08J2301/10 C08L1/10 C08L1/12 C08L1/14 G02B5/3033 G02F2201/086 Y10T428/31971 G02F1/133528 **European:** C08J5/18 C08L1/10 C08L1/12 C08L1/14 M08J301/10 S02B5/30P1 S02F1/1335P S02F201/08U **US:** 106/171.1 349/96 428/1.31 428/1.310P 428/1.33 428/532 428/532S 525/330.3



Family:

Publication number	Publication date	Application number	Application date
CN101189295 A	20080528	CN200680019955	20060530
CN101189295 B	20101215	CN200680019955	20060530
JP5040651 B1	20121003	JP20070520062T	20060530
JP5040651 B2	20121003	JP20070520062	20060530
KR101310571 B1	20130923	KR20077028303	20060530
KR20080013996 A	20080213	KR20077028303	20060530
TW200712103 A	20070401	TW20060119731	20060602
TW1389948 B	20130321	TW20060119731	20060602
US2006280882 AA	20061214	US20060445580	20060602
US7749578 BB	20100706	US20060445580	20060602
WO06132105 A1	20061214	WO2006JP310719	20060530

Priority:
JP20050168004 20050608 JP20050249041 20050830 WO2006JP310719 20060530
JP20070520062 20060530

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; TAKEBE TAKASHI ; OKA SHIGEKI ; SHIMIZU KUNIO

Assignee(s): AIRBUS OPERATIONS SAS

Inventor(s): (std): KUNIO SHIMIZU ; OKA SHIGEKI ; SHIGEKI OKA ; SHIMIZU KUNIO ; TAKASHI TAKEBE ; TAKEBE TAKASHI

Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: OPTICAL FILM, PROCESSING **METHOD** OF OPTICAL FILM AND PROCESSING DEVICE OF OPTICAL FILM

Abstract: Source: US2010092780A A processing **method** of an optical film comprising the step of: subjecting a long length roll-film continuously conveyed to a treatment so as to be brought in contact with a processing solution containing at least one type of gas selected from reducing gas and oxidizing gas.

Classifications:

International (IPC 8-9): B01J19/10 B05C1/06 B05D3/10 B32B9/04 C08J7/02

C23C16/52 G02B1/11 (Advanced/Invention);

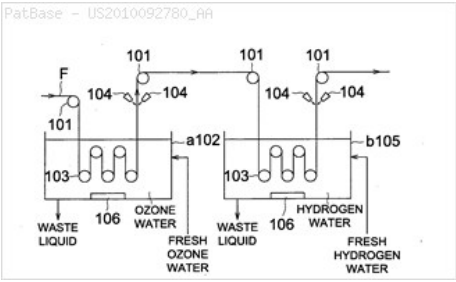
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G02B1/10 (Core/Invention)

CPC: Y10T428/31504 G02B1/11 C08J7/02

European: C08J7/02 G02B1/11

US: 118/264 427/337 427/560 427/8 428/411.1



Family:

Publication number	Publication date	Application number	Application date
US2010092780 AA	20100415	US20060989970	20060712
WO07018012 A1	20070215	WO2006JP313822	20060712

Priority:

JP20050230708 20050809 WO2006JP313822 20060712

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA OPTO INC ; MORINAGA YOSHIKI ; NAKAJIMA KOJI ; NAKASHIMA KOJI ; TANAKA TAKESHI

Inventor(s): (std): MORINAGA YOSHIKI ; NAKAJIMA KOJI ; NAKASHIMA KOJI ; TANAKA TAKESHI

Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

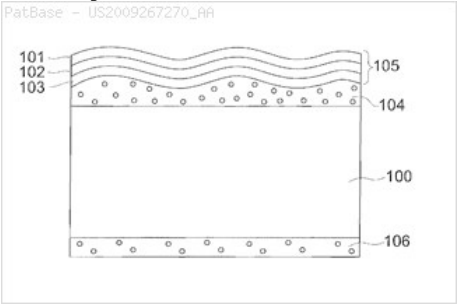
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Title: PROCESS FOR PRODUCING FILM WITH CONCAVO-CONVEX PATTERN

Abstract: Source: US2009267270A The present invention provides a process for producing a concavo-convex pattern film which excels in its peelability from an embossing roll and in coatability of an anti-reflection layer, etc. There is provided a process of producing a concavo-convex pattern film by forming a concavo-convex pattern on the **surface** of a transparent resin film employing an embossing roll having on the **surface** a convex-concavo pattern, characterized in that the embossing roll is made of **glass** and a photocatalyst layer is provided on the **surface** of the embossing roll, characterized in that the process comprises the steps of introducing a UV curable resin composition between the embossing roll and a transparent resin film provided around the embossing roll to form a UV curable resin layer, exposing the UV curable resin layer to UV rays to form a UV cured resin layer having on the **surface** a concavo-convex pattern, the UV rays being emitted from the interior of the embossing roll, and peeling the UV cured resin layer together with the transparent resin film from the embossing roll.

Classifications:

International (IPC 8-9): B29C33/38 B29C39/18 B29C59/04
B29C59/16 (Advanced/Invention);
B29L7/00 B29L9/00 (Advanced/Non-invention);
B29C59/00 B29C59/04 (Core/Invention)
CPC: B29C35/0888 B29C39/148 B29C39/18 B29C59/046 B29C2035/0827
European: B29C35/08M B29C39/14C B29C39/18 B29C59/04L L29C35/08B4
US: 264/447



Family:

Publication number	Publication date	Application number	Application date
JP4888392 B2	20120229	JP20070536423T	20060818
US2009267270 AA	20091029	US20060066614	20060818
WO07034643 A1	20070329	WO2006JP316216	20060818

Priority:

JP20050271737 20050920 WO2006JP316216 20060818 JP20070536423 20060818

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA OPTO INC ; MURAKAMI TAKASHI ; SHIBUE TOSHIAKI ; TANAKA TAKESHI

Inventor(s): (std): MURAKAMI TAKASHI ; SHIBUE TOSHIAKI ; TANAKA TAKESHI

Agent(s): LUCAS AND MERCANTI LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MANUFACTURING **METHOD** OF CELLULOSE ACYLATE FILM, CELLULOSE ACYLATE FILM, POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY

Abstract: Source: US2008057227A A cellulose acylate film manufacturing **method** based on melt-casting film formation technique, the comprising steps of: extruding a cellulose acylate film from a casting die, and sandwiching the cellulose acylate film between an elastically deformable touch roll and a cooling roll, wherein the cellulose acylate film includes at least one kind of compounds expressed by the following general formula (1) and at least one kind of phosphoric acid compounds selected from among phosphite, phosphonite, phosphinite and phosphane, wherein R¹¹ through R¹⁶ each indicate a hydrogen atom or substituents.

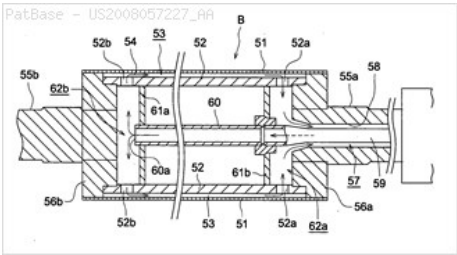
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CPC: Y10T428/10 C08J5/18 C08B3/06 C08B3/16 C08B3/18 C08J2301/10 G02B5/30

European: C08B3/06 C08B3/16 C08B3/18 C08J5/18 M08J301/10 S02B5/30

US: 428/1.1 428/1.100P



Family:

Publication number	Publication date	Application number	Application date
KR20090045921 A	20090508	KR20097003691	20090223
TW200831571 A	20080801	TW20070131884	20070828
US2008057227 AA	20080306	US20070895734	20070827
WO08026514 A1	20080306	WO2007JP66450	20070824

Priority:
JP20060237564 20060901 WO2007JP66450 20070824

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; MIURA NORIO ; NAKAMURA KAZUAKI ; SUZUKI TAKAYUKI

Inventor(s): (std): MIURA NORIO ; NAKAMURA KAZUAKI ; SUZUKI TAKAYUKI

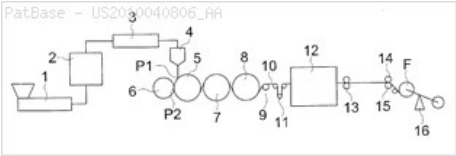
Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CELLULOSE ESTER OPTICAL FILM, POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY USING THE CELLULOSE ESTER OPTICAL FILM, AND **METHOD** FOR PRODUCING CELLULOSE ESTER OPTICAL FILM

Abstract: Source: US2010040806A Disclosed is a cellulose ester optical film characterized by containing a cellulose ester, a polymer (a) defined below and a compound (b) defined below. (a) a polymer obtained by copolymerizing an ethylenically unsaturated monomer having a partial structure represented by the general formula (1) below in a molecule and at least one ethylenically unsaturated monomer (b) at least one compound selected from the group consisting of carbon radical scavengers, phenol compounds and phosphorus compounds. (In the formula, R1, R2 and R3 independently represent an optionally substituted aliphatic group, an optionally substituted aromatic group or an optionally substituted heterocyclic group; or alternatively any two of R1, R2 and R3 may combine and form a ring structure together with a nitrogen atom or with a nitrogen atom and a carbon atom to which they are bonded to.)

Classifications:
International (IPC 8-9): B28B11/08 B29C47/14 B29C49/08 B29C55/00 B29C55/12 B29D11/00 B29K1/00 C08F220/36 C08F220/58 C08F220/60 C08F226/06 C08F26/06 C08G73/02 C08J5/18 C08K5/04 C08K5/13 C08K5/1535 C08K5/51 C08K5/5393 C08L1/00 C08L1/10 C08L33/26 C08L39/04 C08L39/06 C08L57/12 C09D101/00 C09D201/00 C09D4/00 C09J101/00 C09J4/00 G02B5/30 G02F1/1335 (Advanced/Invention); B29K1/00 (Advanced/Non-invention); B29C47/14 B29C55/12 B29D11/00 C08F26/00 C08J5/18 C08K5/00 C08L1/00 C08L39/00 C08L57/00 G02B5/30 G02F1/13 (Core/Invention)
CPC: C08K5/103 B29C55/12 B29C47/0021 B29C47/165 B29C47/8845 B29D11/00 B29K2001/00 B29K2001/12 B29K2995/0018 C08J5/18 C08J2301/10 C08K5/0008 C08L1/10 C08L1/14 G02B1/04 G02F2201/50 G02F2413/02 Y10T428/1041 G02F1/133528 G02F1/133634
European: B29C47/88C4B B29C55/12 B29D11/00 C08J5/18 C08L1/10 C08L1/14 G02B1/04 L29C47/16B L29K1/00 L29K1/12 L29K995/00E M08J301/10 M08K5/00P M08K5/103 S02F1/1335P S02F1/13363N S02F201/50 S02F413/02
US: 106/168.01 106/170.1 106/170.42 264/1.1 264/1.100S 264/1.6 264/1.600S 264/291 428/1.31 428/1.310P 524/37 524/37P 524/37S 525/185 526/260 526/260S



Family:

Publication number	Publication date	Application number	Application date
CN101652684 A	20100217	CN200880010795	20080324
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CN101680989 B	20120328	CN200880017758	20080324
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TWI475057 B	20150301	TW20080111686	20080331
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US2010069535 AA	20100318	US20080528498	20080324
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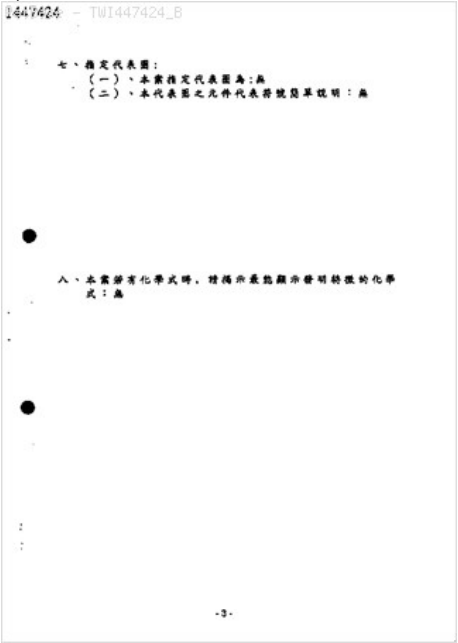
Priority:
JP20070097135 20070403 JP20070214620 20070821 WO2008JP55396 20080324
WO2008JP55395 20080324 JP20090507465 20080324 JP20090507466 20080324

Probable Assignee: KONICA MINOLTA OPTO INC
Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; KONICA MINOLTA OPTO INC JP ; NAKAHARA ISSEI ; SUZUKI TAKATUGU ; SUZUKI TAKAYUKI
Inventor(s): (std): SUZUKI TAKATUGU ; SUZUKI TAKAYUKI ; ISSEI NAKAHARA ; NAKAHARA ISSEI ; TAKATUGU SUZUKI ; TAKAYUKI SUZUKI
Agent(s): LUCAS AND MERCANTI LLP
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CLEAR HARD COAT FILM, ANTI-REFLECTION FILM, POLARIZING PLATE AND DISPLAY DEVICE EMPLOYING THE SAME

Abstract: Source: US2010104879A The invention provides a clear hard coat film which exhibits excellent film strength even after the alkali saponification treatment of the hard coat layer conducted in order to improve the tight adhesion property to PVA film constituting a substrate of a polarizing film in laminating the polarizing film with the hard coat film and which is little deteriorated in the film strength even after the durability test under exposure to ozone; and anti-reflection film, a polarizing plate and a display device made by using the clear hard coat film. The invention relates to a clear hard coat film comprising hard coat layer having clear hard coat film on a transparent film substrate wherein the hard coat layer contains a fluorine-siloxane graft polymer and an energy actinic radiation curable resin. It is preferable that the weight ratio of the fluorine-siloxane graft polymer to energy actinic radiation curable resin is 0.05:100 to 5.00:100, and the energy actinic radiation curable resin is preferably a UV ray curable resin. It is preferable to subject the hard coat layer to alkali saponification.

Classifications:
International (IPC 8-9): B32B27/08 B32B27/28 B32B27/30 B32B7/02 C08J7/04 G02B1/10 G02B1/11 G02B5/30 G02F1/1335 (Advanced/Invention); B32B27/08 B32B27/28 B32B27/30 B32B7/02 C08J7/00 G02B1/10 G02B5/30 (Core/Invention)
CPC: Y10T428/31663 G02B1/105 B32B23/04 B32B23/08 B32B23/20 B32B25/08 B32B27/08 B32B27/16 B32B27/18 B32B27/20 B32B27/283 B32B27/285 B32B27/306 B32B27/308 B32B27/322 B32B27/36 B32B27/365 B32B27/40 B32B2250/24 B32B2255/00 B32B2255/26 B32B2264/02 B32B2264/10 B32B2270/00 B32B2307/4026 B32B2307/412 B32B2307/418 B32B2307/42 B32B2307/50 B32B2307/514 B32B2307/536 B32B2307/554 B32B2307/714 B32B2307/7246 B32B2457/20 B32B2457/202 G02B1/111
European: B32B27/30 G02B1/10B G02B1/11B
US: 428/447



Family:

Publication number	Publication date	Application number	Application date
CN101687403 A	20100331	CN200880021327	20080516
CN101687403 B	20150401	CN200880021327	20080516
JP5321456 B1	20131023	JP20090520402	20080516
JP5321456 B2	20131023	JP20090520402T	20080516
KR101445423 B1	20140926	KR20097026757	20080516
KR20100027149 A	20100310	KR20097026757	20080516
TW200907401 A	20090216	TW20080123099	20080620
TWI447424 B	20140801	TW20080123099	20080620
US2010104879 AA	20100429	US20080452165	20080516
WO09001629 A1	20081231	WO2008JP59040	20080516

Priority:
JP20070167197 20070626 WO2008JP59040 20080516 JP20090520402 20080516

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; OKANO SATOSHI

Inventor(s): (std): OKANO SATOSHI ; SATOSHI OKANO

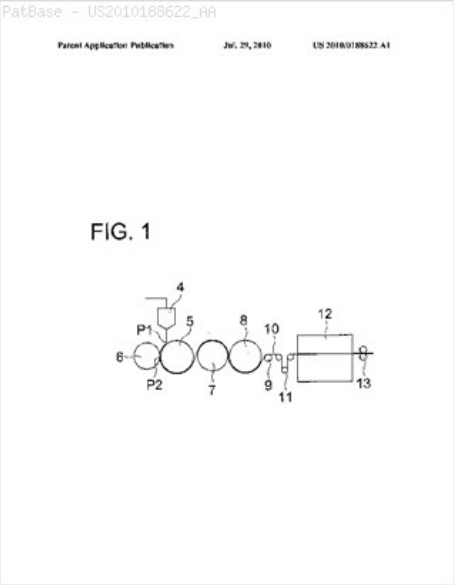
Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CELLULOSE ESTER FILM, **METHOD** FOR PRODUCING CELLULOSE ESTER FILM, POLARIZING PLATE USING THE SAME, AND LIQUID CRYSTAL DISPLAY

Abstract: Source: US2010182548A Disclosed is a cellulose ester film which is suppressed in volatilization of components during film formation, while having high **surface** flatness, high durability after saponification and good adhesion to a polarizer. Also disclosed is a **method** for producing such a cellulose ester film by melt forming. Further disclosed are a polarizing plate having high light resistance and high durability, and a liquid crystal display having high image quality. Specifically disclosed is a cellulose ester film characterized by containing a cellulose ester, a compound represented by the general formula (1) below, and a compound represented by the general formula (2) below.

Classifications:
International (IPC 8-9): B29C39/00 B29C47/14 B29D7/01 B29K1/00 B29L11/00 B29L7/00 C08J5/18 C08K5/101 C08K5/107 C08K5/151 C08K5/1535 C08K5/5393 C08L1/10 C08L5/00 G02B1/08 G02B5/20 G02B5/30 G02F1/13 G02F1/1335 (Advanced/Invention); B29K1/00 B29L11/00 B29L7/00 G02B5/30 G02F1/1335 (Advanced/Non-invention); B29C39/00 B29C47/14 B29D7/00 C08J5/18 C08K5/00 C08L1/00 C08L5/00 G02B1/08 G02B5/30 G02F1/13 (Core/Invention); B29C47/14 B29K1/00 B29L11/00 B29L7/00 C08K5/107 C08K5/1535 C08K5/5393 C08L1/10 G02B5/30 G02F1/1335 (Core/Non-invention)
CPC: C08L1/14 G02B1/04 C08J2301/14 G02B5/3033 B29C47/0004 B29C47/0021 B29C47/14 B29C47/8845 B29K2001/00 B29K2001/12 B29K2105/256 C08K5/005 C08J5/18 C08J2301/10 C08K5/0008 C09D5/24 G02B1/105 G02F2201/50 G02B1/043 G02B5/30 Y10T428/10 Y10T428/1086 C08L1/10 G02F1/1335 G02F1/133528
European: C08J5/18 C09D5/24 G02B1/04B2 G02B5/30P1 L29C47/00B L29C47/14 L29C47/88C4B L29K1/00 L29K1/12 L29K105/25C4 M08J301/10 M08K5/00P M08K5/00P6 S02B1/10B S02B5/30 S02F1/1335P S02F201/50
US: 106/162.2 106/162.7 106/162.700S 264/217 264/217S 264/299 264/299S 349/117 349/118 349/119 349/120 349/121 349/122 349/96 349/96P 359/485 359/485.01 359/485.010S 359/485S 428/1.1 428/1.6 516/106 528/1



Family:

Publication number	Publication date	Application number	Application date
CN101679682 A	20100324	CN200880020308	20080703
CN101679682 B	20120613	CN200880020308	20080703
CN101679683 A	20100324	CN200880020415	20080703
CN101679683 B	20121024	CN200880020415	20080703
JP5604871 B1	20141015	JP20090523595	20080703
JP5604872 B1	20141015	JP20090523596	20080703
KR101471691 B1	20141210	KR20097026030	20080703
KR101526024 B1	20150604	KR20097026031	20080703
KR20100034731 A	20100401	KR20097026030	20080703
KR20100034732 A	20100401	KR20097026031	20080703
TW200922992 A	20090601	TW20080126984	20080716
TW200927811 A	20090701	TW20080126980	20080716
TWI429703 B	20140311	TW20080126980	20080716
TWI437038 B	20140511	TW20080126984	20080716
US2010182548 AA	20100722	US20080664481	20080703
US2010188622 AA	20100729	US20080664683	20080703
US8088831 BB	20120103	US20080664481	20080703
US8274625 BB	20120925	US20080664683	20080703
WO09011228 A1	20090122	WO2008JP62082	20080703
WO09011229 A1	20090122	WO2008JP62083	20080703

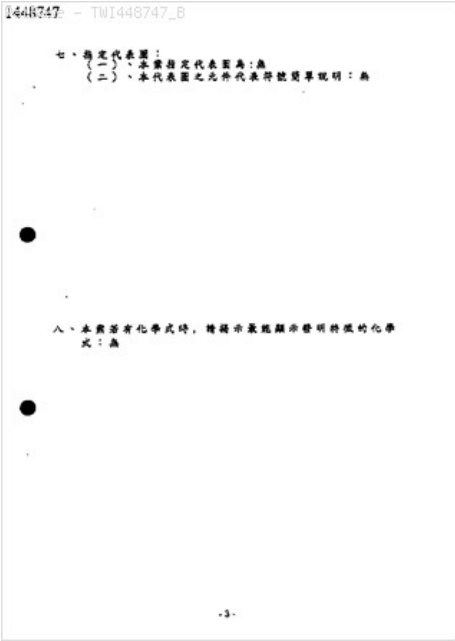
Priority:
JP20070188137 20070719 JP20070209231 20070810 WO2008JP62083 20080703
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Probable Assignee: KONICA MINOLTA OPTO INC
Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; SUZUKI TAKATUGU ; SUZUKI TAKAYUKI
Inventor(s): (std): TAKATUGU SUZUKI ; TAKAYUKI SUZUKI ; SUZUKI TAKAYUKI ; SUZUKI TAKATUGU
Agent(s): LUCAS AND MERCANTI LLP
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZW

Title: OPTICAL FILM, POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY APPARATUS

Abstract: Source: US2009068377A Disclosed is an optical film having a hard coat layer on a cellulose ester film, which contains an ester compound composed of a furanose structure or a pyranose structures and a sum of a number of the furanose structures or the pyranose structure is 1 to 12, provided that a part of hydroxy groups of the furanose structure or the pyranose structure has been esterified and a part of hydroxy groups of the furanose structure or the pyranose structure remains.

Classifications:
International (IPC 8-9): B32B23/20 B32B27/06 B32B27/36 B32B5/16 C08B3/00 C08J7/04 C08L1/00 C08L1/10 C09K19/00 G02B1/10 G02B1/11 G02B5/30 G02F1/1335 (Advanced/Invention); B32B23/20 B32B27/36 C07H13/04 C07H13/08 C08B33/02 G02B1/11 G02B5/30 (Advanced/Non-invention); B32B23/00 B32B27/06 B32B27/36 B32B5/16 C08B3/00 C08L1/00 C09K19/00 G02B1/10 G02B5/30 G02F1/13 (Core/Invention); C08L1/00 G02B5/30 (Core/Non-invention)
CPC: G02B1/105 C08J7/047 C08J2301/12 G02B5/30 Y10T428/10 Y10T428/105 Y10T428/25 Y10T428/31591
European: G02B1/10B S02B5/30
US: 349/122 349/96 428/1.1 428/1.100P 428/1.33 428/323 428/323S 428/425.1 428/425.100S 524/35 524/35S 536/58 536/58S



Family:

Publication number	Publication date	Application number	Application date
JP5218411 B1	20130626	JP20090531206T	20080829
JP5218411 B2	20130626	JP20090531206T	20080829
KR101454054 B1	20141027	KR20107004634	20080829
KR20100053596 A	20100520	KR20107004634	20080829
TW200928464 A	20090701	TW20080133760	20080903
TWI448747 B	20140811	TW20080133760	20080903
US2009068377 AA	20090312	US20080203210	20080903
US8840974 BB	20140923	US20080203210	20080903
WO09031464 A1	20090312	WO2008JP65511	20080829

Priority:
JP20070231262 20070906 WO2008JP65511 20080829 JP20090531206 20080829

Probable Assignee: KONICA MINOLTA OPTO INC

Assignee(s): (std): KONICA MINOLTA ADVANCED LAYERS INC ; KONICA MINOLTA OPTO INC ; KUKI RYOTA

Inventor(s): (std): KUKI RYOTA

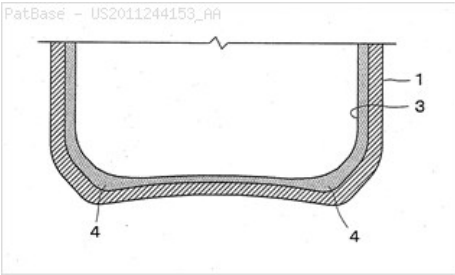
Agent(s): LUCAS AND MERCANTI LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **METHOD** FOR TREATING INSIDE **SURFACE** OF **GLASS** CONTAINER AND **GLASS** CONTAINER

Abstract: Source: US2011244153A Foaming of polysilazane applied to the inside **surface** of a **glass** container is prevented during sintering, and the amount of alkali elution from the inside **surface** of the **glass** container into a solution in the container is reduced. The inside **surface** of a **glass** container is treated by the steps of applying a polysilazane solution to the inside **surface** of the **glass** container, drying polysilazane while the **glass** container in the state of being inverted and inclined 50 degrees to 70 degrees is rotated, and sintering polysilazane, so that foaming of polysilazane can be prevent during sintering and the amount of alkali elution from the inside **surface** of the **glass** container can be reduced.

Classifications:
International (IPC 8-9): B05D7/22 B32B1/08 B65D23/02 B65D25/14 C03C17/00 C03C17/25 C03C17/28 C03C17/30 C03C17/34 C03C23/00 C09D183/16 (Advanced/Invention); B65D23/02 (Advanced/Non-invention)
CPC: B65D23/02 C03C17/30 C03C17/004 B05D1/002 B05D3/0254 B05D7/227 B05D2203/35 B05D2518/12 C03C17/25 C03C2217/213 C03C2218/11 C03C2218/31 Y10T428/131
European: B65D23/02 C03C17/00B4A C03C17/25 C03C17/30 L05D1/00C L05D203/35 L05D3/02S L05D518/12 L05D7/22C M03C217/213 M03C218/110 M03C218/310
US: 427/230 427/230S 427/231 427/237 427/237S 427/384 428/34.4 428/34.400P



Family:

Publication number	Publication date	Application number	Application date
CN102317168 A	20120111	CN201180000106	20110118
CN102317168 B	20130626	CN201180000106	20110118
JP4808827 B1	20111102	JP20110506526	20110118
KR101262727 B1	20130509	KR20117006142	20110118
KR20110118120 A	20111028	KR20117006142	20110118
TW201200483 A	20120101	TW20110109707	20110322
TWI411588 B	20131011	TW20110109707	20110322
US2011244153 AA	20111006	US20110120485	20110118
US8389052 BB	20130305	US20110120485	20110118
WO11121811 A1	20111006	WO2010JP64189	20100823
WO11122067 A1	20111006	WO2011JP50726	20110118
WO11125241 A1	20111013	WO2010JP64190	20100823

Priority:
JP20100079086 20100330 JP20100088483 20100407 WO2011JP50726 20110118
JP20110506526 20110118

Probable Assignee: TOYO GLASS CO LTD

Assignee(s): (std): GOGUN YASUHIRO ; MIYAMOTO MASANORI ; OHSHIBA KAZUMOTO ; SHIOZAWA KAZUYUKI ; TOYO GLASS CO LTD

Assignee(s): TOYO GLASS CO

Inventor(s): (std): GOGUN YASUHIRO ; KAZUYUKI SHIOZAWA ; MIYAMOTO MASANORI ; OHSHIBA KAZUMOTO ; SHIOZAWA KAZUYUKI ; YASUHIRO GOGUN

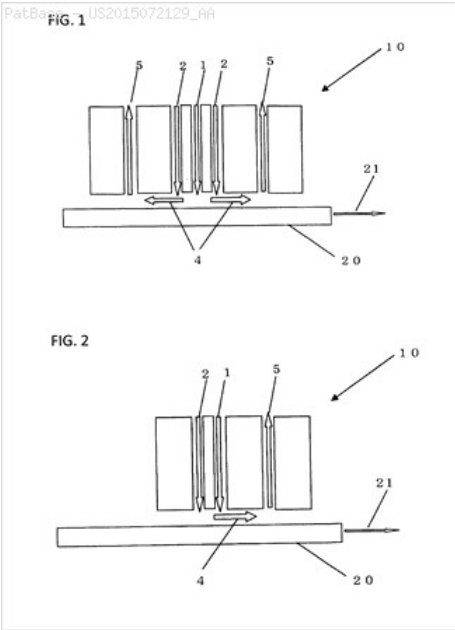
Agent(s): WENDEROTH LIND AND PONACK L L P; WENDEROTH LIND AND PONACK LLP; KAMBE MAKOTO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: GLASS SHEET CAPABLE OF BEING INHIBITED FROM WARPING THROUGH CHEMICAL STRENGTHENING

Abstract: Source: US2015072129A A glass sheet includes 4 mol percent or more of Al₂O₃. In the glass sheet, a surface Na₂O amount in one surface of the glass sheet is lower than the surface Na₂O amount in the other surface of the glass sheet by 0.2 mass percent to 1.2 mass percent.

Classifications:
International (IPC 8-9): C03B18/02 C03B18/14 C03B18/20 C03B27/03 C03C15/00 C03C17/22 C03C21/00 C03C23/00 C03C3/083 C03C3/112 C03C4/18 G09F9/00 (Advanced/Invention); C03C21/00 (Advanced/Non-invention)
CPC: C03C3/112 C03C4/18 C03C2204/00 C03C21/002 C03C15/00 C03C23/0055 Y10T428/31 Y10T428/315 Y10T428/24355
US: 428/141 428/220 428/409 428/410 501/11



Family:

Publication number	Publication date	Application number	Application date
CN104203858 A	20141210	CN201380016799	20130318
CN104203859 A	20141210	CN201380016910	20130318
CN104203860 A	20141210	CN201380017057	20130318
CN104220393 A	20141217	CN201380017148	20130318
CN104245616 A	20141224	CN201380017036	20130318
JP2013146438 A1	20151210	JP20140507738T	20130318
JP2013146439 A1	20151210	JP20140507739T	20130318
JP2013146440 A1	20151210	JP20140507740T	20130318
JP2013146441 A1	20151210	JP20140507741T	20130318
JP2013146442 A1	20151210	JP20140507742T	20130318
JP2013146442 A1	20151210	JP20140507742T	20130318
JP5790872 B1	20151007	JP20140507742T	20130318
JP5790872 B1	20151007	JP20140507742T	20130318
KR20140138792 A	20141204	KR20147027135	20130318
KR20140138793 A	20141204	KR20147027139	20130318
TW201343582 A	20131101	TW20130110556	20130325
TW201343585 A	20131101	TW20130110547	20130325
TW201343586 A	20131101	TW20130110552	20130325
TW201348154 A	20131201	TW20130110546	20130325
TW201348156 A	20131201	TW20130110548	20130325
US2015072129 AA	20150312	US20140498120	20140926
US2015079347 AA	20150319	US20140498055	20140926
WO13146438 A1	20131003	WO2013JP57724	20130318
WO13146439 A1	20131003	WO2013JP57725	20130318
WO13146440 A1	20131003	WO2013JP57727	20130318
WO13146441 A1	20131003	WO2013JP57728	20130318
WO13146442 A1	20131003	WO2013JP57729	20130318

Priority:

JP20120081072	20120320	JP20120069557	20120326	JP20120078171	20120329
JP20120081072	20120330	JP20120081073	20120330	JP20120276840	20121219
WO2013JP57729	20130318	WO2013JP57724	20130318	WO2013JP57728	20130318
WO2013JP57725	20130318	WO2013JP57727	20130318	JP20140507742	20130318
JP20140507738	20130318	JP20140507739	20130318	JP20140507741	20130318
JP20140507740	20130318				

Probable Assignee: ASAHI GLASS CO LTD

Assignee(s): (std): ASAHI GLASS CO LTD

Assignee(s): ASAHI GLASS CO

Inventor(s): (std): FUKAWA MAKOTO ; HAYASHI YASUO ; IKAWA NOBUAKI ; KATO RYOSUKE ; KOBAYASHI DAISUKE ; MIYASAKA SATOSHI ; MIYASHITA JUNICHI ; NAKADA HIDEKO ; NAKAGAWA KOJI ; NIHEI TOSHIFUMI ; OKAHATA NAOKI ; SERA YOICHI ; SHIRAI MASANOBU ; TANII SHIRO ; WATANABE KUNIO ; YAMANAKA KAZUHIKO

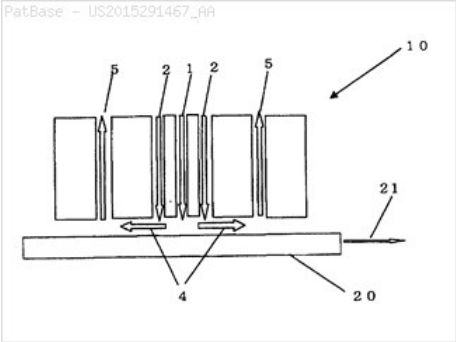
Agent(s): HAMADA YURIKO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **METHOD** FOR MANUFACTURING **GLASS** PLATE WITH WHICH WARPING DURING CHEMICAL STRENGTHENING IS REDUCED AND **GLASS** PLATE

Abstract: Source: US2015291467A The present invention relates to a **method** for producing a float **glass** sheet, containing a step of melting a **glass** source material, a step of forming the **glass** melted in the previous step into a **glass** ribbon while allowing it to float on a molten metal, and a step of annealing the **glass** ribbon, in which the float **glass** sheet is a soda lime silicate **glass**, and in the forming step, a top **surface** of the **glass** ribbon that is opposite to a bottom **surface** thereof to be in contact with the molten metal is subjected to a **dealkalization** treatment in the float bath for 1 to 30 seconds and a **surface** temperature of the **glass** ribbon during the **dealkalization** treatment is 600 degrees centigrade or higher.

Classifications:
International (IPC 8-9): C03B18/02 C03B18/18 C03B18/20 C03B25/08 C03C21/00 C03C3/087 G01N23/223 G01N23/225 (Advanced/Invention); C03B25/08 (Advanced/Non-invention)
CPC: C03C21/002 C03B25/08 C03B18/02 C03B18/18 Y02P40/57 C03C21/005 G01N23/223 G01N23/2258 C03B18/20 C03C3/087



Family:

Publication number	Publication date	Application number	Application date
CN104884398 A	20150902	CN201380068393	20131227
CN104884399 A	20150902	CN201380068423	20131227
KR20150102018 A	20150904	KR20157016850	20131227
KR20150103004 A	20150909	KR20157016964	20131227
US2015291467 AA	20151015	US20150751321	20150626
US2016023945 AA	20160128	US20150753416	20150629
WO14104303 A1	20140703	WO2013JP85126	20131227

Priority:
JP20120285511 20121227 JP20130198470 20130925 WO2013JP85126 20131227
WO2013JP85125 20131227

Probable Assignee: ASAHI GLASS CO LTD
Assignee(s): (std): ASAHI GLASS CO LTD
Inventor(s): (std): IKAWA NOBUAKI ; KADOKURA HOKUTO ; MIURA TAKENORI ; SUZUKI YUICHI ; YASUDA KOHEI ; SASAI JUN ; NAKASHIMA TETSUYA
Agent(s): HAMADA YURIKO ET AL
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW